MANAGEMENT OF FEMALE INFERTILITY BY AYURVEDA

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ABSTRACT

One in every four couples in developing countries had been found to be affected by infertility, when an evaluation of responses from women in Demographic and Health Surveys from 1990 was completed in collaboration with WHO in 2004. In India alone many women are suffering from infertility. In Prasuti –StreeRoga OPD, NIA, Jaipur daily 2-3 new cases are coming with keen interest to conceive. The major causes are including male factor such as azoospermia, hypospadias, female factors such as peritoneal factor, tubal factor, ovarian factor, cervical factor. Sometimes unexplained causes are also present where both the partner is normal. Ayurveda describes Vandhyatva with its treatment protocol. Since many researchers have worked on this burning issue but still the awareness and proper treatment regarding disease are yet to be explored. So this article contents general awareness and clinically used various treatment modalities as per Ayurveda for female infertility.

Keywords: infertility, Vandhyatwa, Ayurveda, streeroga,

INTRODUCTION

Vandhyatva has been longstanding problem of human community right from the ancient period up to this modern era. If the antiquity of Vandhyatva is looked back, one can see the praise of a fertile woman and slander of a barren woman. Also solutions of her barrenness have been mentioned in Veda, Upnishada, Purana etc. So what is infertility / Vandhyatva..?

According to WHO

Infertility is “a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse.”… (WHO-ICMART glossary)¹

“Infertility is the inability of a sexually active, non-contracepting couple to achieve pregnancy in one year.”²

Types of infertility³

1. Primary infertility: It denotes those patients who have never conceived.
2. Secondary infertility: It indicates previous pregnancy but failure to conceive subsequently within one or more years of unprotected regular intercourse.

Common causes:⁴

Conception depends on the fertility potential of both the male and female partner. The male directly responsible in about 30-40 %, the female in about 40-55 % and both are responsible in about 10% cases. The remaining 10% is unexplained.

Male factor:

1. Defective spermatogenesis
2. Obstruction of the efferent duct system
3. Failure to deposit sperm high in the vagina
4. Errors in the seminal fluid.

Female factor:

The important causes of female infertility as given by FIGO Manual (1990) are as follows:

1. Vaginal factors:
2. Uterine factors
3. Tubal factors:
4. Peritoneal factors:
5. Ovarian factors:
6. Coital errors:
7. Cervical factors:

Some Other factors which hamper the Fertility:

Any psychiatric illness can cause hypothalamic dysfunction and anovulatory infertility; Antipsychotic drugs, Endocrine Disorders, Cushing’s syndrome- Cushing’s syndrome causes menstrual irregularities and sub fertility, Thyroid disease, Diabetes-Both type I and type II diabetes are associated with disturbed ovarian function. If the diabetes is poorly controlled anovulatory infertility may occur. Type I diabetes can affect hypothalamic-pituitary function and may be associated with premature menopause due to ovarian autoimmunity.

Women with type II diabetes are hyper insulinemic and insulin increases ovarian steroidogenesis leading to hyper androgenism and the pcos. Conversely, women with PCOS are prone to develop gestational diabetes, especially if they are overweight.

Unexplained infertility -

In about 10% of cases the infertility investigation will show no abnormalities. In these cases abnormalities are likely to be present but not detected by current methods. Possible problems could be that the egg is not released at the optimum time for fertilization, which it may not enter the fallopian tube, sperm may not be able to reach the egg, fertilization may fail to occur, transport of the zygote may be disturbed, or implantation fails. It is increasingly recognized that egg quality is of critical importance and women of advanced maternal age have eggs of reduced capacity for normal and successful fertilization.

Material and Methods:

In this article literary reference was collected from Ayurvedic classics, commentaries, modern literature, other recently published books, research journals and internet.

Literary view of Vandhyatwa

The woman in whom there is a hindrance of any kind to the normal process of conception is called Vandhya.

Classification:

The Classification of Vandhyatva has not been given separately in any classics except Harita Samhita, Rasa RatnaSammuchaya and VandhyaKalpadruma.

Harita(Ha. S. III. 48:1-3) have described six types of Vandhya with special clinical features.

(Ha.TritiyaSthana 48)

(1) Kakavandhya: -The woman who has one child but second time she is not conceived.
(2) Anapatya: - The woman who has no child or primary infertility.
(3) Garbhasravi: - The woman who has repeated abortion.
(4) Mritvatsa: - The woman who has repeated still births.
(5) Balakshaya: - Infertility due to loss of Bala (strength).
(6) Unexplained: - Infertility due to idiopathic cause.

NIDANA OF VANDHYATVA:

Many factors are responsible for Vandhyatva. They are classified into two types.

[A] Essential factors  [B] Causative factors
ESSENTIAL FACTORS FOR FERTILITY:

According to Acharya Charaka⁶:
Matrutah and Pitrutah: The normalcy of Shonita and Shukra.
Aatmatah and Satvataha: Aatma is always encircled with Satva, which descends in the fertilized egg, and forms Garbha (embryo) without them the formation of Garbha is not possible and established idiopathic infertility.
Satmyataha and Rasataha: The normalcy of Shonita and Shukra greatly depend upon the use of SatmyaAahar and Vihar. The nourishment of mother and embryo depend upon the Rasa. Without Rasa even mother cannot survive, so there is no question about embryo.

According to Acharya Sushruta⁷:
Sushrutasimilarizes the achievement of conception with the germination of a seed by saying that,
Rutu: Fertile period is more explained by Acharya Dalhana that Rutu means Rajaha Kala i.e. ovulation period.
Deposition of the spermatozoa in the upper vagina should be in appropriate time of the menstrual cycle.
Kshetra: Anatomically and physiologically adequate reproductive organs. Vagina must be healthy.
Cervix and its secretion are also permitted to pass spermatozoa. The ovuduct must be patent and sufficient ciliary movement is present. The uterus must be capable of supporting implantation and fetal growth throughout pregnancy.
Ambu: Proper nourishment to genital organs, adequate hormonal level and proper nutrition is required for genital organs.
Beeja: The adequate ovum and spermatozoa and the female’s ovulatory mechanisms must be normal. The male must produce an adequate number of normal spermatozoa.

In the practice so many cases are seen, in which all above factors are fulfilled, yet pregnancy cannot take place. This condition is known as idiopathic Vandhyatva. This condition can be explained by the Atmaja and Satvaja Bhavas of Acharya Charaka.
So in any abnormality in these essential factors, cause Vandhyatva.

CAUSATIVE FACTORS:

Without Vata the Yoni never gets spoilt, Vandhyatvahas also been described in eighty types of Vatavyadhi⁸ (Cha. Chi. 30/115).So, Vata is the prime causative factor of Vandhyatva.
Acharya Charaka has clearly described the Nidan⁹ of Vandhyatwawhich are almost similar to causes of infertility according to modern science.

A. YONI PRADOSHAT:
The word "Yoni" refers to entire reproductive system. Thus under this heading, congenital or acquired disease of anatomic components of reproductive system i.e. vagina, cervix, uterus, fallopian tubes can be included.
It includes,
1) Yonivyapada: All twenty Yonivyapada (gynecological disorders), if not treated properly cause infertility (Abeejata)¹⁰: (Su. Sha.2/3).
2) Injury to ArtavavahaSrotas¹¹: Acharya Sushruta has included Vandhyatva under the clinical feature of injury to ArtavahaSrotas along with other symptoms i.e. dyspareunia and amenorrhoea (anovulation).
3) Yoniarsha¹²: Yoniarsha on cervix produces infertility by destroying the Artava.
4) Garbhakoshabhanga¹³: Word 'Bhanga" also refers to prolapse of uterus or its retro-displacement, is one of the cause of infertility (Ha.TritiyaSthana 48/1-2).
5) Bhagasankocha¹⁴: During coitus with a
girl before her menarche (very young girl), deep lacerations or tear of vulva and vagina may take place. Healed scars of these ulcers may produce constriction of vagina; thus, hamper proper penetration of penis during coitus resulting into incomplete coitus, a cause of infertility.

(6) SphalitaMutratva\textsuperscript{15}: Sphalitamutratva in girls is also responsible for Vandhyatva i.e. partial obstruction or spasm of urethra, for which the most common cause is gonorrheal urethritis, because gonococci causes inflammation of reproductive system along with urinary system. Gonorrhealsalpingitis is very common cause of infertility.

(7) Utkshipta Yoni\textsuperscript{16}: Upward displacement of cervix in cases of retro flexion of uterus is one of the cause of infertility.

(8) Aticharana Yoni Yyapada\textsuperscript{17}: Acharya Sushruta says that this disease is caused by excessive coitus. The woman does not achieve conception. All the authors have accepted excessive coitus as the cause of this condition. Charakaand Vagbhatta have described it to be Vataja, while Sushruta due to Kaphaja. In the initial stage, due to intense sexual desire, the woman may feel vaginal itching and due to repeated coitus may have excessive mucoid unctuous secretion from cervical and endometrial glands, which are the clinical features of Kapha as explained by Sushruta. Bhavaprakashaahas explained that in this condition the woman discharges Raja before the ejaculation of male partner. It appears to be analogous to vaginal inflammation due to excessive coitus associated with infertility.

B) MANSIKA ABHITAPA\textsuperscript{18}:

Normal psychology of the Couple is very important for achievement of pregnancy. Fear of doing sex, marital disharmony and infrequent coitus affect the fertility.

According to Acharya Charaka (Sha. 2/40)pragyapradh, parinaam, kaal. are 3 causes for all the diseases. Herepragyapradhhas ManasikaAbhighetah affects the fertility.

Due to Stress, Bhaya, Shoka, Krodha, Lajja etc., Vata will be vitiated. So, it increases hypothalamic activity of CRH (corticotrophin releasing hormone) and further it inhibits normal GnRH pulsatile secretion and ultimately anovulatory cycles occur.

C) BEEJADUSHTI\textsuperscript{19}:

When in Ovum, the gene concerned with uterus is damaged, the progeny becomes sterile.

D) SHUKRA DUSHTI\textsuperscript{20}:

Quantitative and qualitative abnormalities of sperms along with spermatic fluid cause infertility. Pitruja Bhavas described under six factors are carried to the embryo through sperms.

E) ARTAVA DUSHTI\textsuperscript{21}:

The word Artava refers to ovum, menstrual blood, and ovarian hormones abnormality of ovum and ovarian hormones produce infertility.

F) AHARADOSHA:

Dietetic abnormalities cause infertility in two ways:

1. By producing loss of Dhatu and that of Dhatvagni, thus they influence hormones.
2. By vitiating Doshas which cause various gynecological disorders, leading to infertility.

Dietetic abnormalities influence nourishment of the body or cause loss of Dhatu which influences normal secretion of hormones.

G) VIHARA DOSHA:

Abnormal mode of life and suppression of natural urges aggravate Doshas, which produce various gynecological ab-
normalities. Other than the supine posture of the women during coitus, discharge of semen on SamiranaNadi or outside the vagina comes under defective practice. In all these conditions probably semen is not properly deposited inside the vaginal canal. Thus sperm fail to enter uterus causing infertility.

Abnormalities of mode of life also produce infertility in two ways-
1. By vitiating Doshas, they cause gynecological disorder
2. By preventing proper entry of sperm due to faulty deposition of seminal ejaculation.

H) AKALA YOGA:
The word “Kala” refers to period of age and Rutukala both.

In adolescent girls and old ladies due to premenarche and menopause stage respectively and before or after Rutukala due to absence and destruction of ovum respectively, the conception does not take place.

I) BALA KSHAYA:
Balav refers to physical strength and capacity to become pregnant. Here, probably Balarefers to infertility due to unknown cause or premature aging or any systemic disorder.

PURVARUPA:
In Kashyapa Samhita, Acharya Kashyapa has described “Vandhya Yoni” in context of VatajaNanatmajaVyadhi. AvyaktaPurvarupa of VataVyadhi has been mentioned by Charakaas per this quotation-

So, purvarupa of Vandhyatva is not described by anyone, anywhere.

RUPA:
A woman, in whom Artava has been destroyed, is termed as Vandhya.

### PROBABLE SAMPRAPTI GHATAKA:

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<thead>
<tr>
<th>Dosha</th>
<th>Tridosha with pre dominant Vata.</th>
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<tr>
<td>Dhatu</td>
<td>Rasa, Rakta</td>
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<td>Upadhatu</td>
<td>Artava</td>
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<td>Srotasa</td>
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<td>Udbhavasthana</td>
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<td>Adhishthana</td>
<td>Trayavarta Yoni</td>
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<td>Marga</td>
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### RESULTS
Many studies focusing infertility have been carried out but the vast nature of the disease is attracting many researchers to work on the topic.

Some of the studies with their results are listed below:

“An analytical study of prajasthapannahakashaya on vandhyatwa w.s.r to female infertility”.

“Efficacy of yoga vasti in anovulation: a pilot study” – in this study 6 patients had ovulation out of b patients.

“Management of Vandhyatwa with ChitrakadiGhrutam and PhalaGhrutam”.

Both the group A and B had 50 patients, Group A was given chitrakadiGhritam and Group B was given PhalaGhritam – and the results showed that chitrakadighritam is highly significant in management of infertility.

### DISCUSSION
The discussion includes the detailed treatment plan, sadhyataasadhya, pathyaapathyaprevention:

Vandhyatva is described by our Acharyas in a very wide sense including the Nidanas and Chikitsa. Treatment de-
pends upon the specific causes of Vandhyatva. The Vandhya described by Charaka as congenital disease is incurable.

Acharya Harita explains that first five types of Vandhya are curable.
Sadhya: Kakavandhya, Garbhakosha-parasnga, Garbhasravi, Mritvatsa, Balakshaya.
And the sixth type is Kashtasadhya.

Regarding treatment, So many treatments have been given in our texts. But which type of infertility or on which factor like Rutu, Kshetra, Ambu, Beeja, it will act, it is not mentioned clearly. But treatment has been given according to the cause i.e. Yoni Vyapadas, ShukraDushti, ArtavaDosha etc. So it is very important to find out the cause which is responsible for Vandhyatva.

Vitiated Vata is the root cause of Yonirogas. So Vatadushti has to be treated first, following by other PrakupitaDoshas.
The treatment has been divided in to two types.

a. ShodhanaChikitsa
b. ShamanaChikitsa

(A) SHODHANA CHIKITSA:

Panchakarma therapy (for ShariraShodhana purpose) should be done, especially Basti because of its wide range and effective use for VataDosha.

Importance of Panchakarma:
1) Pre-conceptional use of panchakarma to get quality progeny:

The couple who wants best progeny should undergo the process of panchakarma, after panchakarma male should take ksheera ghrita and female should take tila taila and Urada.

In our daily practise we generally use
Dashmula Taila - Snehana
Dashamula Kwatha - Dwedana,
Trivritadileham - Virechan

Bala panchanga Kwath - Asthapana
Bala Taila- Anuvasana
2) Virechana for ovulation:

Patient with PCOS, generally we use virechana
For snehana we use many Ghrita like Brahmi ghrita, Phalaghrita, Shatavarighrita, etc.
3) Nasya karma as prescribed in Punsanvanvidhi helps in conception and stability of pregnancy.

Nasya with Anutaila may helps to regulate H-P-O axis.
4) Aasthapanabasti and AnuvasanaBasti followed by Uttar Basti useful to correct ovulatory factor, tubal factor, uterine factor and cervical factor.

Uttar basti with brahmighrita, phalaghritashatavarighrita helps in KshetraNirmana,
Uttar basti with ksharaghrita, panchagavyaghrita, dhanvantartaila helps to patent the tubes.
5) Shirodhara used to regulate H-P-O axis.

Shirodhara with taila, dashmulakwatha, milk, takra as per prakriti and dosh dushti in patient.

(B) SHAMANA CHIKITSA:

The therapeutic measures mentioned for Pradara, Raktatisara, Shonitapitta, Raktarsha can be adopted as Yoni RogaChikitsa.

Rasayana and Vajikarana drugs are also useful for treating Yoni Roga.

MutradoshaPratishodhakadrugs can be used in Yoni Rogas (Su. Su. 2/12). The line of treatment described for ShukraDosha, Artavadosha, and Stanyarogacan be adopted for ArtavadushtiChikitsa (Su. U. 38/32)

PATHYA APATHYA:

Pathya:

Ahara:
1. The women who consume Lasuna never remain infertile\(^1\) (Ka. Kalp.)
2. Milk\(^2\) is beneficial for Vandhya and also helps to achieve pregnancy.
3. Meat\(^3\) increase Retas and Shukra, and beneficial for Vandhya (Ka. Khi. 24/5).
4. Root of Surana, Vandhyakarkotaki and Devadali are Pathya\(^4\). (Ka. Khi. 24/5).

**Vihara:** Coitus during Rutukala

**Apathya:** Suran, Kanji, Vidari and TikshimaAhaara.

**CONCLUSION**

Infertility is a global problem, so researchers are moving towards this problem. Ayurveda can give a promising hand to over this problem.

Couple should follow some instructions.

**General instructions for couple are:**

1. Reduction of weight in overweight or obese persons.
2. Avoidance of Alcohol and heavy smoking.
3. Avoidance of tight and warm undergarments.
4. Avoidance of too frequent intercourse.
5. Counseling for psychosocial evaluation.
6. Discuss - Psychology and coital problem.
7. Advice to intercourse during the time of LH surge (detected by LH test kit, one can LH surge in urine by getting a deep blue colour of dipstick. The test should be performed daily between days 12 to 16 of a regular cycle).

**Preventions**

Some cases of female infertility may be prevented by taking the following steps:

1. Avoid excessive exercise.
2. Avoid smoking.
3. Control diseases such as diabetes and hypothyroidism.
4. Follow good weight management guidelines.
5. Get early treatment for sexually transmitted diseases.
6. Have regular physical examinations to detect early signs of infections or abnormalities.
7. Limit caffeine and alcohol intake.

**REFERENCES**

6. Charaka Samhita revised by charak and dridhbala with vidyotini hindi commentary by Pt kashinathshastri edited by rajeshwar data shasthirrasthanadhyaya 4 shlok number 4 , page 867 ,published by chaukambhabharati publication,
7. Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikaduttashastrirasthan chapter 2 shlok 35page 15 published by chaukambhasanskritasantan.
8. Charaka Samhita revised by charak and dridhbala with vidyotini hindi commentary by Pt kashinathshastri edited by rajeshwar data shastichiktsast-
hanadhyaya 30 shlok number 115 , page 858 ,published by chaukhambhabharati publication,
9. Charaka Samhita revised by charak and dridhbala with vidyotinihindi commentary by Pt kashinathshastri ed- ited by rajeshwar data shastisharirasthanadhyaya 2 shlok number 7, page 838 ,published by chaukhambhabharati publication,
10. Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikaduttashastrisharirasthan chapter 2 shlok 7 page 12 published by chaukhambhasanskritasanstan.
12. Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikaduttashastrisharirasthan chapter 2 shlok 18 page 239 published by chaukhambhasanskritasanstan.
15. Kashyapa Samhita by vridhajivaka with Sanskrit introduction revised by Pt hemrajsharma with vidyotinihindi commentary sutra sthanadhyaya 28 shloka nu 6 page 48 published by chaukhambhasanskritaparakashan.
17. Su. U. 38/16 Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikaduttashastristriuttarstan chapter 38 shlok 16 page 159 published by chaukhambhasanskritasanstan.
18. Charaka Samhita revised by charak and dridhbala with vidyotinihindi commentary by Pt kashinathshastri edited by rajeshwar data shastisharirasthanadhyaya 3 shlok number 3, page 851 ,published by chaukhambhabharati publication,
19. Charaka Samhita revised by charak and dridhbala with vidyotinihindi commentary by Pt kashinathshastri edited by rajeshwar data shastisharirasthanadhyaya 4 shlok number 30 , page 877 ,published by chaukhambhabharati publication,
20. Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikaduttashastrisharirasthan chapter 2 shlok 5 page 9 published by chaukhambhasanskritasanstan.
23. Ayurvediyaprasutitantraevamstriroga part II striroga by
Dr Suresh Kumar Solanki & Dr Sushila Sharma: Management Of Female Infertility By Ayurveda

Prof. Premvatitewari, edition second reprint 2007, published by chaukhambhaorientalia, chapter 5 page 274


27. Charaka Samhita revised by charak and dridhbala with vidyotinihindi commentary by Pt kashinathshastri edited by rajeshwar data shastichikitsasthanadhayaya 30 shlok number 115 , page 858 ,published by chaukhambhabharati publication,

28. Charaka Samhita revised by charak and dridhbala with vidyotinihindi commentary by Pt kashinathshastri edited by rajeshwar data shastichikitsasthanadhayaya 30 shlok number 327 , page 887 ,published by chaukhambhabharati publication

29. Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikaduttashas-trisharirasthan chapter 2 shlok 12 page 11 published by chaukhambhasanskritasanthan

30. Su. U. 38/16 Sushruta Samhita edited with Ayurveda tatvasandipikahindi commentary by kavirajambikadutta-shastritutarsthan chapter 38 shlok 32 page 163 published by chaukhambhasanskritasanthan


34. Ayurvediyaprasutitantraevamstriroga part II striroga by Prof. Premvatitewari, edition second reprint 2007, published by chaukhambhaorientalia, chapter 5 page 274

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